BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Draft Amendments to Regulation 5: Open Burning and Regulation 6: Particulate Matter and Visible Emissions, Rule 3: Wood-Burning Devices

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I. EXECUTIVE SUMMARY

California experienced some of the deadliest and most destructive wildfires in its history over the last two years. Wildfire events are becoming the new normal and new wildfire prevention initiatives and actions are needed. Studies show that climate change is not only causing higher temperatures and longer dry periods, but also lengthening the fire season and increasing the risk of wildfires throughout the state. Wildfires have the potential to destroy entire communities and burn everything in their path, producing a mixture of fine particulate matter and hazardous chemicals and compounds in the air we breathe.

Wildfire smoke presents immediate impacts to local air quality and public health, and atmospheric conditions can quickly transport smoke to affect the air quality of an entire region and even that of nearby states. The devastating fires in Napa and Sonoma County in 2017 and the Butte County Camp Fire in 2018 generated unprecedented levels of particulate matter, which reached hazardous levels never before experienced in the Bay Area. Wildfires are an imminent threat to air quality and public health in the Bay Area region and across the entire state.

Over the last year, the Bay Area Air Quality Management District (Air District) developed the *Wildfire Air Quality Response Program* (WAQRP), a comprehensive, multi-faceted program intended to prevent, prepare for, and respond to future wildfires, and to ensure that health-protective measures and strategies are in place during wildfire smoke events. One facet of the program is to ensure that Air District rules and regulations continue to protect and improve public health, air quality and the global climate.

To complement statewide wildfire prevention efforts, the Air District is proposing amendments to Regulation 5: Open Burning (Reg 5) and Regulation 6, Rule 3: Wood-Burning Devices (Rule 6-3). The draft regulatory actions are consistent with new statewide initiatives and legislation intended to reduce the risk of catastrophic fires by implementing prescribed burning (*e.g.*, SB1260 *Fire Prevention and Protection: Prescribed Burns*; SB901 *Wildfires*; Executive Order N-05-19[1]). On March 22, 2019, Governor Newsom proclaimed a State of Emergency throughout California ahead of the upcoming fire season and directed the State to expedite fuel reduction projects in wildfire-vulnerable communities. These initiatives have called for statewide support from air quality regulators and fire protection agencies to encourage prescribed burning to prevent catastrophic wildfires similar to those experienced in 2017 and 2018.

The Air District is proposing amendments to Reg 5 to help reduce potential cost barriers associated with open burning fees to align with statewide efforts to prevent larger, more destructive wildfires through increased prescribed burning. The draft Reg 5 amendments would:

- Exempt public agencies from paying Open Burning Operation Fees when conducting prescribed burns for the purpose of wildfire prevention (Reg 5, Section 113).

- Clarify the administrative requirement for Open Burning Operation Fees (Reg 5, Section 411).

[1] Governor Newsom issued Executive Order N-05-19 in January 2019 directing California Department Forestry and Fire Protection (CAL FIRE) to recommend immediate, medium, and long-term wildfire prevention measures. CAL FIRE published *The Community Wildfire Prevention and Mitigation Report* in February 2019.

The Air District is also proposing amendments to Rule 6-3 to further help protect public health when wildfire smoke affects air quality in the Bay Area. The draft Rule 6-3 amendments would:

- Extend the Air District's authority to ban wood burning or combustion in wood-burning devices year-round when particulate matter is forecasted to exceed 35 micrograms per cubic meter ($\mu g/m^3$) (Reg 6, Rule 3, Sections 211, 224 and 301). The current rule only prohibits wood burning during the wintertime (November – February) and the draft amendment will allow the Air District to ban wood burning any time unhealthy levels of particulate matter are forecasted.

II. BACKGROUND

A. Wildfire Behavior and Characteristics

Weather, terrain, and the stage of a fire can influence fire behavior and the impacts of its smoke plume. In general, windy conditions decrease smoke concentrations due to horizontal dispersion; however, windy conditions can also cause fires to spread more quickly, resulting in larger fires that emit more smoke. Regional weather patterns can dominate a fire's behavior for days and be the determining factor of where and how smoke may affect an area. For example, the October 2017 North Bay wildfires started during a Diablo wind event, when wind patterns in the Bay Area reversed to offshore, blowing from inland areas toward the coast, causing wildfire smoke to impact large portions of the Bay Area. These winds can also transport smoke over long distances into the Bay Area, as exemplified by the November 2018 Camp Fire in Butte County, which spread smoke across the Bay Area within hours of the fire's ignition even though the fire was burning 200 miles away.

Terrain also influences fire behavior by altering wind flows. Mountains can cause turbulent airflow that may promote plume down-mixing and increased concentrations of ground-level smoke. In the evening wind speeds tend to be light and temperature inversions are common, especially in mountain valleys and low-lying areas. A temperature inversion occurs when the air near the ground is cooler than the air above, preventing upward air movement. These conditions favor smoke and pollutant accumulation in valleys at night.

The intense heat generated by a fire, especially soon after ignition, lofts smoke particulates high into the air that begin to descend when temperatures cool.[2] The amount of smoke produced during a fire is affected by how much fuel is available, the type of fuel and its moisture content. Initial fire plumes tend to be driven by high wind events, which can facilitate the prediction of smoke impacts downwind. As the smoke moves downwind, it dilutes and becomes widespread, eventually descending to ground level.

B. Wildfire Smoke Composition

Wildfire smoke can contain a combination of hazardous chemicals and mixtures of microscopic particles that are products of incomplete combustion. The 2018 Camp Fire burned 153,336 acres (about 240 square miles) including the entire town of Paradise, with an approximate population of

[2] United States Environmental Protection Agency. 2016. *Wildfire Smoke: A Guide for Public Health Officials.*

27,000. Not only did trees, brush and vegetative material burn, but also approximately 18,800 structures and every object in its path.

Image 1. Camp Fire – Day 1, November 8, 2018 (GOES-16 Imagery).

The individual compounds present in wildfire smoke can number in the thousands. The smoke can also include chemicals emitted from burning metals, plastics and shingles, asphalt, cement and insulation, and fuels like gasoline. Smoke composition depends on multiple factors including how efficiently a fuel burns, the fuel type and moisture content, the fire temperature, wind conditions and other weather-related influences. Different types of wood and vegetation are composed of varying amounts of cellulose, lignin, tannins and other polyphenols, oils, fats, resins, waxes and starches. When burned, these fuel variations produce different compounds that are released in the smoke.

C. Health Hazards of PM2.5

Particulate matter is the principal pollutant of concern from wildfire smoke for relatively short-term exposures that range from hours to weeks. The health effects from exposure to particulate matter can vary from one person to another based on an individual's health, age and duration of exposure. Particulate matter smaller than 10 micrometers (PM10) can irritate the eyes, nose and throat, while particulate matter less than 2.5 microns in diameter (PM2.5 or "fine particulate") can pose serious health concerns as fine particulates can be inhaled deep into the lungs.

People with respiratory illnesses, children, and the elderly are more sensitive to the effects of PM2.5, but prolonged exposure can negatively affect everyone. Numerous scientific studies have linked PM2.5 exposure to a variety of health issues, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function and increased respiratory symptoms such as irritation of the airways, coughing or difficulty

breathing.[3] Healthy individuals can also experience acute effects from exposure to elevated levels of particulates in addition to these more serious health issues.

D. Air Monitoring Network

The Air District has 17 continuous PM2.5 monitors throughout the Bay Area that measure hourly particulate matter concentrations. These monitors were designed to track compliance with federal and state requirements, and are useful for tracking smoke impacts during wildfire events. Air District meteorologists provide daily air quality forecasts by analyzing PM2.5 measurements, satellite imagery, as well as numerical weather and smoke prediction models to determine particulate matter levels in the region. During wildfire events, Air District meteorologists provide more frequent monitoring updates due to the variable nature of wildfire smoke plumes, with the intent to keep the public informed of the latest smoke impacts.

Image 2. Air District Monitoring Network.

E. Air Quality Impacts from Wildfires

As the climate continues to warm and become drier, it is anticipated that the frequency of large wildfires will increase and negatively affect air quality in the Bay Area. In the last two years, eight of California's top 20 most destructive wildfires occurred (Figure 1). Three of these fires, Tubbs, Nuns, and Atlas, were located in Bay Area counties.

[3] Bay Area Air Quality Management District 2012. *Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area.*

Top 20 Most Destructive California Wildfires

	FIRE NAME *(CAUSE)*	DATE	COUNTY	ACRES	*STRUCTURES*	DEATHS
1	**CAMP FIRE** *(Under Investigation)*	November 2018	Butte County	153,336	**18,804**	85
2	**TUBBS** *(Electrical)*	October 2017	Napa & Sonoma	36,807	**5,636**	22
3	**TUNNEL - Oakland Hills** *(Rekindle)*	October 1991	Alameda	1,600	**2,900**	25
4	**CEDAR** *(Human Related)*	October 2003	San Diego	273,246	**2,820**	15
5	**VALLEY** *(Electrical)*	September 2015	Lake, Napa & Sonoma	76,067	**1,955**	4
6	**WITCH** *(Powerlines)*	October 2007	San Diego	197,990	**1,650**	2
7	**WOOLSEY** (Under Investigation)	November 2018	Ventura	96,949	**1,643**	3
8	**CARR** *(Human Related)*	July 2018	Shasta County, Trinity County	229,651	**1,614**	8
9	**NUNS** *(Powerline)*	October 2017	Sonoma	54,382	**1,355**	3
10	**THOMAS** *(Powerline)*	December 2017	Ventura & Santa Barbara	281,893	**1,063**	2
11	**OLD** *(Human Related)*	October 2003	San Bernardino	91,281	**1,003**	6
12	**JONES** *(Undetermined)*	October 1999	Shasta	26,200	**954**	1
13	**BUTTE** *(Powerlines)*	September 2015	Amador & Calaveras	70,868	**921**	2
14	**ATLAS** *(Powerline)*	October 2017	Napa & Solano	51,624	**783**	6
15	**PAINT** *(Arson)*	June 1990	Santa Barbara	4,900	**641**	1
16	**FOUNTAIN** *(Arson)*	August 1992	Shasta	63,960	**636**	0
17	**SAYRE** *(Misc.)*	November 2008	Los Angeles	11,262	**604**	0
18	**CITY OF BERKELEY** *(Powerlines)*	September 1923	Alameda	130	**584**	0
19	**HARRIS** *(Undetermined)*	October 2007	San Diego	90,440	**548**	8
20	**REDWOOD VALLEY** *(Powerline)*	October 2017	Mendocino	36,523	**546**	9

**"Structures" include homes, outbuildings (barns, garages, sheds, etc) and commercial properties destroyed.
***This list does not include fire jurisdiction. These are the Top 20 regardless of whether they were state, federal, or local responsibility.

3/14/2019

Figure 1. Top 20 Most Destructive California Wildfires (CAL FIRE).

The 2017 and 2018 wildfires produced 16 of the 20 highest PM2.5 concentrations measured in the Bay Area since measurements began in 1999 (Figure 2). The November 2018 Butte County Camp Fire accounted for 12 of those Top 20 PM2.5 days.

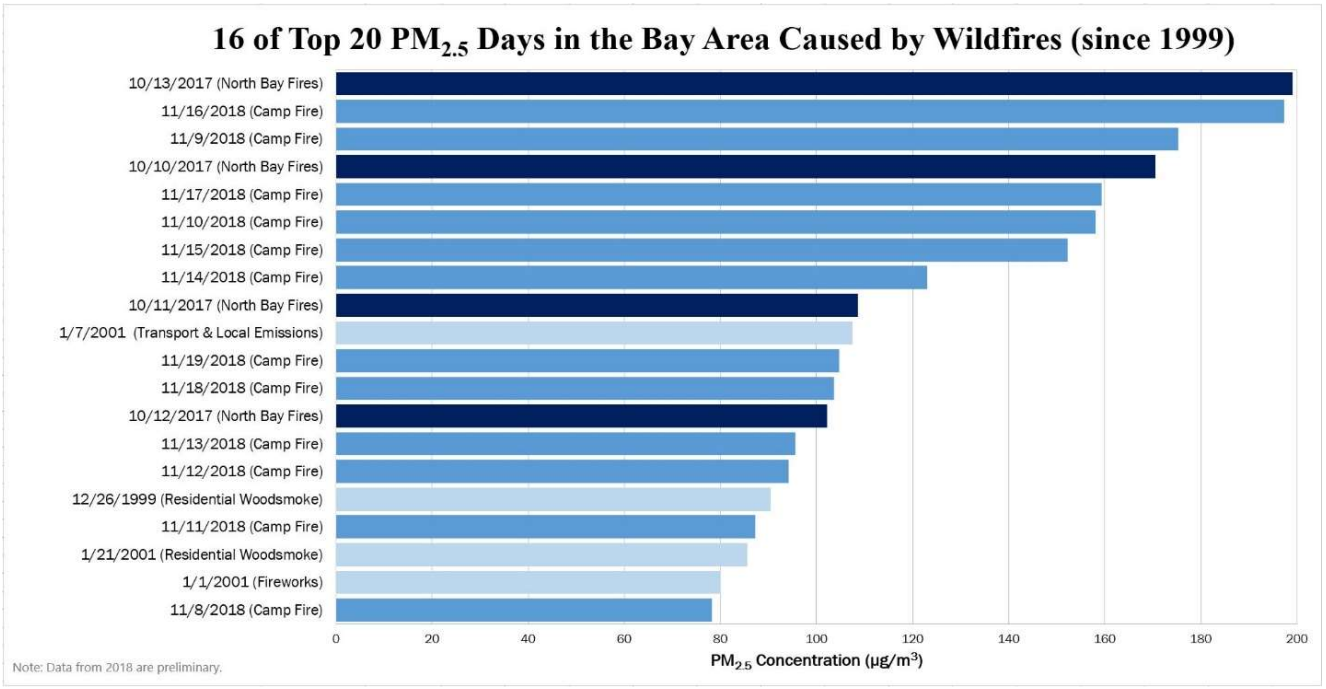

Figure 2. Top 20 24-hour average PM2.5 concentrations in the Bay Area.

During the 2018 Camp fire, particulate matter concentrations in the Bay Area were elevated from November 8th through the 21st with several days experiencing “Very Unhealthy” to “Hazardous” levels of PM2.5 (Figure 3). The Bay Area suffered under a haze of unhealthy smoke for nearly two weeks.

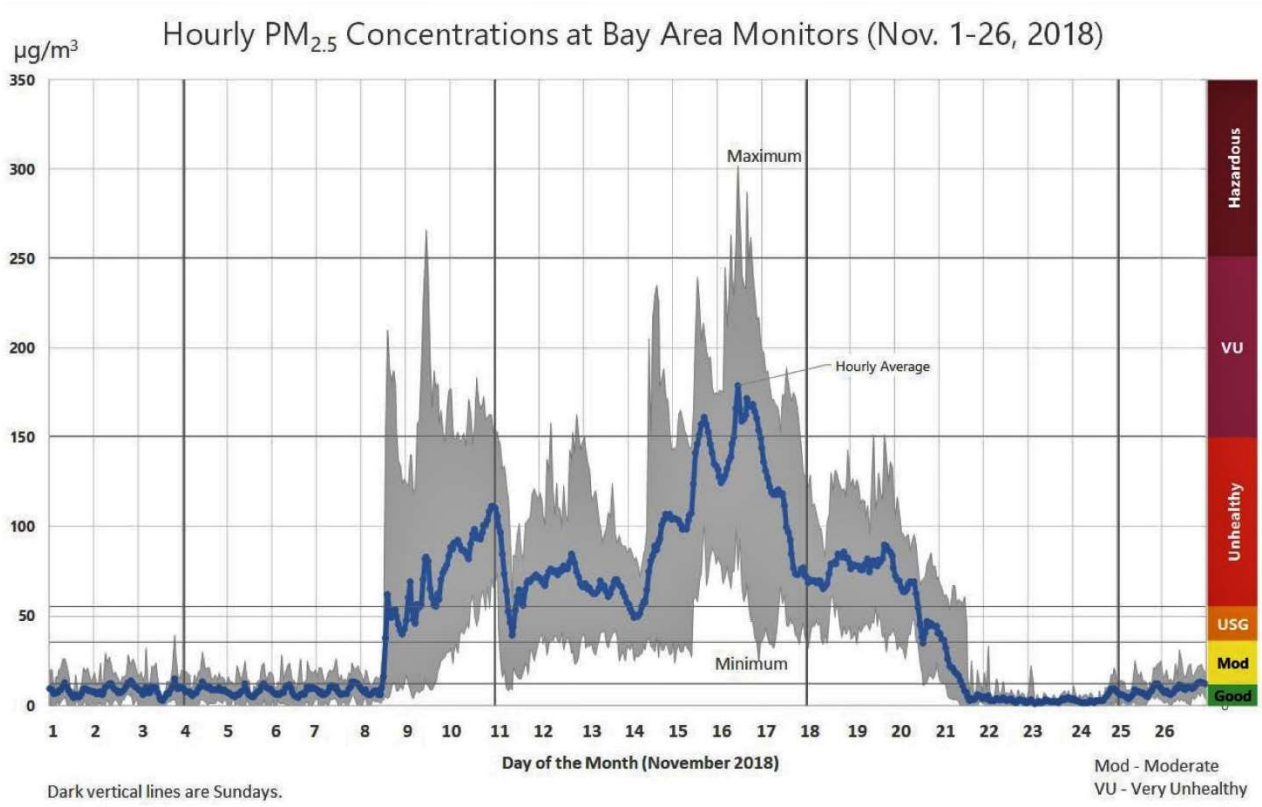

Figure 3. Hourly PM2.5 concentrations at Bay Area monitors from November 1-26, 2018.

III. DRAFT AMENDMENTS TO REGULATION 5: OPEN BURNING

Outdoor fires, also known as open burning, produce hundreds of tons of air pollutants per year in the Bay Area and generate very fine particulates in the air we breathe. To minimize the impact on public health, Air District Reg 5 prohibits open burning with the exception of 17 types of fires that are conditionally allowed on designated permissive burn days when meteorological conditions are favorable for dispersion.

One allowable fire type is “prescribed burning”, which is the planned, controlled application of fire to vegetation to achieve specific natural resource management objectives, including wildfire prevention, and ensure fire safety. Prescribed burns are designed to burn less intensely than wildfires and are lit amid controlled conditions to minimize potential smoke impacts. Wildfire events are more likely to result in harmful air quality and public health impacts than prescribed burning because wildfires are unplanned and typically larger compared to prescribed burns. Wildfires tend to last longer and burn more vegetation per acre than prescribed burns.

In addition to fuel reduction benefits, prescribed burning also restores the structure and composition of forest ecosystems. Prescribed burns operate at lower temperatures than wildfires

and lowers the likelihood that damaging, severe wildfire emergency events will occur. Wildfires can reach such high temperatures and intensity that they completely consume and destroy ecosystems, whereas prescribed burns make forest environments healthier, more stable, and more resilient to change. Due to historical fire suppression efforts, many forests in California contain excess amounts of vegetation that serve as fuel and, as a result, are highly susceptible to catastrophic wildfires. Prescribed burning is a way to reduce the potential for larger, more destructive wildfires, prevent harmful wildfire smoke impacts, and maintain healthy forest ecosystems.

One type of prescribed burn allowed by Air District Regulation is termed a Wildland Vegetation Management fire. This fire type is conducted by a state or federal agency, or through a cooperative agreement or contract involving such agencies, on land predominately covered with chaparral, trees, grass, coastal scrub or standing brush. Any person seeking to set fires under the Wildland Vegetation Management fire type must submit a smoke management plan and receive written approval from the Air District. Reg 5 requires the plan to include a smoke management prescription, which includes measurable criteria when a prescribed burn may be ignited. Prescription criteria may include, but are not limited to, procedures to minimize smoke impacts, as well as safety, economic, public health, environmental, geographic, administrative, social or legal considerations. The Air District reviews smoke management plans to ensure prescribed burns are conducted during specific meteorological conditions that achieve favorable smoke dispersion and reduce impacts to surrounding communities. Prior to ignition, the burner must request a burn allocation from the Air District. The Air District reviews these requests and determines approvability of the burn allocation.

In California, the rate of fuel reduction projects through prescribed burning, fuels treatment, and thinning of forests averages approximately 250,000 acres per year. In 2018, Governor Brown directed the State to double its efforts within five years to at least 500,000 acres per year.[4]

Due to these statewide efforts to prevent wildfires, fuel reduction projects are expected to sharply increase throughout the next few years and beyond. While it is uncertain how many additional prescribed burns by public agencies the Air District will review, the Air District intends to support wildfire prevention measures taken to reduce fuels to prevent larger, more catastrophic wildfires that can create public health emergencies. The Air District proposes to amend Reg 5 to eliminate fees to public agencies that conduct prescribed burning for wildfire prevention for the benefit of the public and environment. The amendments are consistent with CAL FIRE's report *Community Wildfire Prevention and Mitigation Report,*[5] which recommends CAL FIRE coordinate with air quality regulators to enable increased use of prescribed burning and to help reduce costs and complexities for the burners.

The Air District recognizes the role that prescribed burning plays in wildfire prevention. The fuel reduction and ecological benefits of prescribed burning are known, and the increased use of prescribed burning as a land management practice is necessary to prevent the types of devastating wildfires experienced in 2017 and 2018. The draft amendments to Reg 5 would remove potential cost barriers for public agencies conducting a prescribed burn for wildfire prevention purposes.

[4] Governor Brown issued Executive Order B-52-18 in May 2018 to improve forest and community resilience to wildfire and other climate impacts.

[5] http://www.fire.ca.gov/downloads/45-Day%20Report-FINAL.pdf

The section below provides a description of the draft amendments to Reg 5. The full text of the draft rule can be found in Appendix A of this report.

A. Add Limited Exemption for Public Agency (Reg 5, Section 113)

The Air District is proposing to amend Reg 5 by adding a limited exemption for any public agency conducting a prescribed burn for the purpose of wildfire prevention as approved by the Air District. The draft amendment is intended to complement statewide efforts by removing potential barriers to prescribed burning conducted for wildfire prevention purposes. The draft amendment would exempt a public agency from having to pay an Open Burning Operation Fee, as required by Reg 5, Section 411.

In 2013, the Board of Directors adopted Regulation 3, Schedule V: Open Burning, which established open burning fees for each type of fire allowed pursuant to Reg 5.[6] A person conducting one of the allowable fires,[7] is required to pay the associated operation fee (Reg 5, Section 411). Currently, prescribed burn fee amounts are based on the proposed acreage to be burned. The Wildland Vegetation Management Fire fee, as outlined in Regulation 3, Schedule V, is the fee associated with prescribed burns.[8]

In the past ten years, prescribed burning in the Bay Area conducted by public agencies peaked in 2010 at 2,331 acres and has been steadily declining ever since (Figure 4). After 2013, the total number of smoke management plans submitted to the Air District has decreased, but the total acreage burned has remained consistent to previous years. In the past ten years, a majority of smoke management plans were submitted by public agencies, and the Air District anticipates this trend to continue since Wildland Vegetation Management fires are performed by or through a cooperative agreement with a state or federal agency.

[6] BAAQMD Regulation 3 Fees: Schedule V: Open Burning. http://www.baaqmd.gov/~/media/dotgov/files/rules/archive-2018-regulation-3/documents/rg-0300-2018-pdf.pdf?la=en.

[7] *See* Regulation 5, Section 401

[8] As of July 1, 2019, the fee is $602 for a proposed Wildland Vegetation Management Fire project less than or equal to 50 acres; $816 for a proposed project 50 acres to 150 acres; and $1,062 for a proposed project greater than 150 acres.

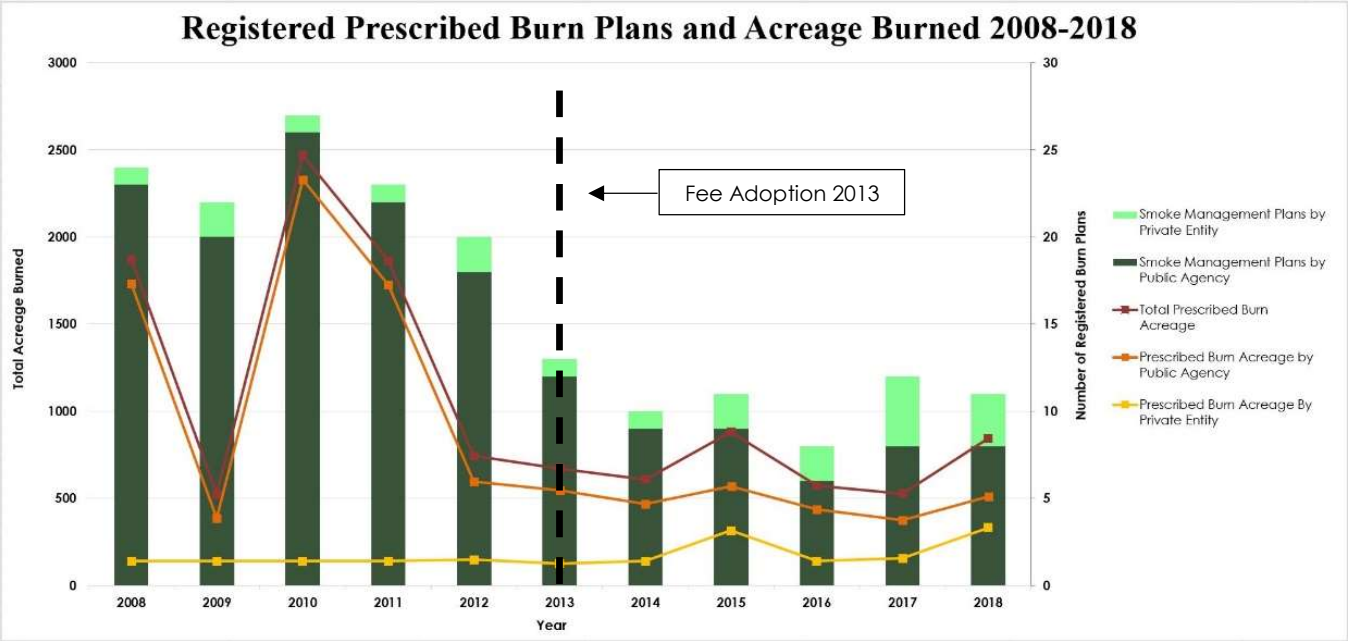

Figure 4. Registered Prescribed Burn Plans and Acreage Burned in the Bay Area (2008 – 2018).

Since the fee schedule went into effect in July 2013, the Air District has collected approximately $20,772 in Wildland Vegetation Management Fire fees from 45 prescribed burn applications submitted by public agencies (Table 1). The Air District does not anticipate this fee exemption to significantly impact program revenue; it is intended to complement statewide efforts to remove potential cost barriers associated with prescribed burning for wildfire prevention.

	2013	2014	2015	2016	2017	2018	Total
Fees Paid	$3,400	$4,075	$2,214	$3,925	$3,463	$3,695	**$20,772**
Plans Submitted	5	9	9	6	8	8	**45**

Table 1: Total fees paid and plans submitted by public agencies to conduct prescribed burning since fee adoption.

B. Clarification and Amendment of Definitions (Reg 5, Section 200)

The Air District proposes to clarify and add definitions to Reg 5 to support draft rule amendments:

Mandatory Burn Ban (Section 223)

Reg 5 currently defines “Curtailment Period” as any period declared by the Air Pollution Control Officer (APCO) when there is a negative public health impact from burning anticipated. The Air District proposes to rename “Curtailment Period” to “Mandatory Burn Ban” to be consistent with Regulation 6, Rule 3: Wood-Burning Devices Section 211. The draft change is administrative and would not change the intended definition or purpose.

Public Agency (Section 225)

The draft amendment adds the definition of a “Public Agency” to the rule; a term that is used in the draft limited exemption (Reg 5, Section 113) that exempts a public agency conducting a prescribed burn for the purpose of wildfire prevention from paying fees as required by Reg 5, Section 411.

C. Clarification of Standard – Mandatory Burn Ban for Recreational Fires (Reg 5, Section 302)

The Air District proposes to clarify that no person shall ignite or maintain any recreational fire during Mandatory Burn Ban periods. A recreational fire is a fire that is used for social, cultural, or other activities. Campfires and bonfires are examples of recreational fires. The Air District proposes to rename "Mandatory Curtailment" to "Mandatory Burn Ban" to be consistent with Reg 5, Section 223. The draft change is administrative and does not change the intended definition or purpose.

D. Clarification of Administrative Requirement – Allowable Fires: Wildland Management (Reg 5, Section 401.15)

Wildland Vegetation Management fire type is currently defined in Reg 5, Section 401.15 as "prescribed burning by a state or federal agency or through a cooperative agreement involving the state or federal agency." The Air District proposes to replace "state or federal" agency with "public" agency to be consistent with the draft limited exemption for public agencies (Reg 5, Section 113).

E. Clarification of Administrative Requirement – Open Burning Operation Fees (Reg 5, Section 411)

Reg 5 requires any person who conducts an allowable fire to pay an associated burn fee. The requirement currently does not specify when an applicant must pay the fee. The amendment is administrative and intended to clarify that the operation fee must be paid prior to burning.

IV. DRAFT AMENDMENTS TO REGULATION 6: PARTICULATE MATTER AND VISIBLE EMISSIONS, RULE 3: WOOD-BURNING DEVICES

The purpose of Rule 6-3 is to protect public health by limiting emissions of particulate matter and visible emissions from wood-burning devices used for primary heat, supplemental heat or ambiance. When air quality is forecasted to be unhealthy due to elevated levels of fine particulate matter, this rule allows the Air District to issue a Winter Spare the Air Alert and impose a Mandatory Burn Ban during the months of November through February to prohibit wood burning (Rule 6-3, Sections 211, 227, and 301).

When wood and other solid fuels are burned, the smoke emitted contains fine particulates, $PM_{2.5}$, that can penetrate deep into the lungs and cause serious health problems such as difficulty breathing, aggravated asthma and even premature death for people with heart or lung disease. Winter weather conditions, such as atmospheric inversions, can trap wood smoke close to the ground, concentrating air pollution to unhealthy levels. When these conditions occur, wood smoke accounts for the largest portion of wintertime fine particulate matter in the Bay Area.

The Air District recognizes that wildfires are becoming the new normal and is proposing amendments to Rule 6-3 to further protect public health year-round. As demonstrated by the Camp Fire in 2018, wildfires are not limited to the summer months and may occur at any time of the year. The draft amendments to Rule 6-3 would allow the Air District to prohibit wood burning throughout the year whenever particulate matter concentrations are forecasted to exceed 35 $\mu g/m^3$.

The draft rule changes do not affect the existing limited exemptions that allow wood burning when a Mandatory Burn Ban is in effect. Rule 6-3 limited exemptions for Sole Source of Heat (Section 110), Non-functional, Permanently Installed Heater (Section 111) and Loss of Natural Gas and/or Electric Power (Section 112) will continue to allow people who meet the limited exemption applicability, and who have registered EPA certified wood heaters (Section 404), to use a wood-burning device.

This section provides a description of the draft amendments to Rule 6-3. The full text of the draft rule amendments can be found in Appendix B of this report.

A. Clarification and Amendment of Definitions (Rule 6-3, Section 200)

The Air District proposes to amend the following definitions to the Rule:

Mandatory Burn Ban (Section 211)

Currently, Rule 6-3 defines "Mandatory Burn Ban" as any period during which the air quality is forecasted by the Air District to be unhealthy due to ambient levels of particulate matter and burning wood or any solid fuels is not allowed in the Bay Area. The definition also specifies that a Mandatory Burn Ban is announced through a Winter Spare the Air Alert.

The Air District proposes to clarify the definition of a Mandatory Burn Ban by adding reference to the 24-hour PM2.5 federal health standard of 35 $\mu g/m^3$. This is an administrative change as the PM2.5 federal health standard is currently referenced in the definition of Winter Spare the Air Alert of the existing rule. There is no change to the PM2.5 federal health standard of 35 $\mu g/m^3$.

Within the definition of Mandatory Burn Ban, the Air District also proposes to change how a Mandatory Burn Ban is announced by removing the word "winter" from "Winter Spare the Air Alert." The draft amendment clarifies that a Mandatory Burn Ban may be imposed whenever PM2.5 concentrations are forecasted to exceed 35 $\mu g/m^3$, regardless of the season. This draft amendment is consistent with the proposed change in Section 224, Spare the Air Alert definition.

Rename "Winter Spare the Air Alert" to "Spare the Air Alert" (Section 224)

The purpose of the existing "Winter Spare the Air Alert" is to notify the general public when wood burning is prohibited due to anticipated unhealthy air quality from elevated PM2.5 concentrations. The Air District proposes to rename the existing definition of "Winter Spare the Air Alert" to "Spare the Air Alert." Removing the word "winter" and renaming to "Spare the Air Alert" will allow the Air District to issue a Mandatory Burn Ban any time the Bay Area is forecasted to be impacted by elevated concentrations of particulate matter. The draft amendment also removes the 24-hour PM2.5 federal health standard of 35 $\mu g/m^3$, which has been moved to the "Mandatory Burn Ban" definition (Section 211).

Remove "Winter Spare the Air Season" Definition (Section 228)

The Air District proposes to remove the definition of "Winter Spare the Air Season" to align with the draft modifications to Sections 211 and 224. The removal of Section 228 would allow a "Spare the Air Alert" to be called any time the air quality in the Bay Area is forecasted to be unhealthy due to elevated levels of fine particulate matter. The purpose of this modification is to recognize that wildfires, and associated particulate matter impacts, can occur year-round.

B. Amendment of Standard - Mandatory Burn Ban (Rule 6-3, Section 301)

Rule 6-3 currently prohibits wood burning in the Bay Area during the months of November through February when air quality is forecasted to exceed the 24-hour PM2.5 federal health standard of 35 $\mu g/m^3$. To protect public health, the Air District announces a Winter Spare the Air Alert to notify the public that a Mandatory Burn Ban is in effect and burning wood or any other solid fuels is prohibited.

The Air District proposes to rename the "Mandatory Burn Ban" standard in Section 301 to "Burning Prohibited During Mandatory Burn Ban" to differentiate it from the "Mandatory Burn Ban" definition (Section 211). Since wildfires are unpredictable, emergency events that can occur at any time of the year and are not limited to the months of November through February, the Air District is also proposing to make the standard applicable year-round to protect the health of Bay Area residents. The draft amendment would extend the Air District's authority to announce a Spare the Air Alert to issue a Mandatory Burn Ban any time PM2.5 concentrations are forecasted to exceed 35 $\mu g/m^3$. This change would ensure that air quality during wildfire events is not further exacerbated by wood-burning activities.

The draft amendments are necessary to enhance enforceability of the rule and discourage individuals from operating wood-burning devices when the Bay Area is already being impacted by elevated particulate matter concentrations. In November 2018, the Air District issued a Winter Spare the Air Alert and Mandatory Burn Ban per Rule 6-3 due to the smoke impacts from the Butte County Camp Fire. Thirty-five Notices of Violation were issued to individuals who burned during the Mandatory Burn Ban, however, this was only possible because the wildfire occurred during the Winter Spare the Air Season (November – February). Without the draft amendments, the Air District would not have the authority to prohibit wood-burning activities should the Bay Area experience another devastating wildfire smoke event outside of the winter season.

Based on historical meteorology and emissions data, the Air District expects that projected PM2.5 exceedances and resultant Mandatory Burn Bans will likely only occur in the wintertime due to residential wood smoke or when smoke from wildfires events impact the region. The Air District has never exceeded the federal PM2.5 standard outside of wintertime and wildfire-related PM2.5 events.

V. ENVIRONMENTAL IMPACTS

The California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., and the CEQA Guidelines, 14 CCR 15000 et seq., require a government agency that undertakes or approves a discretionary project to consider the potential impacts of that project on all environmental media. Certain types of agency actions are, however, exempt from CEQA requirements.

The draft amendments to Reg 5 are necessary to prevent or mitigate wildfire-related public health and natural resource emergencies, and consist of the modification of public agency operating expense fees; thus the amendments to Reg 5 are exempt from the provisions of CEQA. Likewise, because the amendments to Rule 6-3 are necessary to prevent or mitigate a public health emergency during wildfire events, the amendments to Rule 6-3 are also exempt from the provisions of CEQA. The Air District plans to file a Notice of Exemption pursuant to State CEQA Guidelines, and seeks comment on this issue.

VI. REFERENCES

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VII. APPENDICES

A. Draft Amendment to Regulation 5: Open Burning

B. Draft Amendment to Regulation 6: Particulate Matter and Visible Emissions, Rule 3: Wood-Burning Devices